

[SEAT BELT RESTRAINT SYSTEM WITH MOVABLE LAP BELT GUIDES]

Abstract of Disclosure

A four-point seat belt restraint system having a lap belt movable between a comfort position wherein the portions of the belt extending over the outsides of the occupant's thighs are generally vertical, and a crash restraint position wherein the same portions extend at an angle downward and to the rear. Belt guides disposed adjacent opposite sides of the seat engage the lap belt as it extends from the anchor points toward the seat cushion. During normal vehicle operations, the belt guide is located in a comfort position that causes the portion of the lap belt passing over and around the outsides of the occupant's thighs to have a relatively vertical orientation. In the event of an actual or impending crash or other rapid vehicle deceleration, a restraints control module commands an actuation mechanism to move the belt guides rearward with respect to the comfort position, allowing the lap belt to extend in a substantially straight line to the rear-located anchor point. The lap belt thus extends downward and rearward at an angle in order to provide better restraint against forward movement of the occupant's pelvis.

Figures

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